WHAT IS CLAIMED IS:

1. A computer-readable medium providing a computer-loadable data structure representing a state-and-transition-based description of a speech grammar, the data structure comprising:

a first transition entry representing a transition from a first state;

a second transition entry representing a second transition from the first state, the second transition entry being contiguous with the first transition entry and having a last-transition value set to indicate that the second transition is the last transition from the first state.

2. The computer-readable medium of claim 1 wherein each transition entry has a fixed size.

3. The computer-readable medium of claim 2 wherein the data structure further comprises a word string comprising words found in the speech grammar.

4. The computer-readable medium of claim 3 wherein each transition entry has a content index value that designates content associated with the transition.

5. The computer-readable medium of claim 4 wherein at least one transition entry has a content index value that is an index into the word string.

6. The computer-readable medium of claim 5 wherein the data structure further comprises rule entries, each rule entry representing a group of transitions.

7. The computer-readable medium of claim 6 wherein at least one transition entry has a content index value that is an index to a rule entry in the rule entries.

8. The computer-readable medium of claim 7 wherein each transition entry further comprises a rule reference flag field that indicates whether the content index value is an index into the word string or an index to a rule entry.

9. The computer-readable medium of claim 7 wherein each rule entry is a fixed size.

10. The computer-readable medium of claim 9 wherein each rule entry comprises a starting transition value that provides an index to a transition entry that represents the first transition for the rule.

11. The computer-readable medium of claim 1 wherein the data structure further comprises a set of semantic entries, each semantic entry representing semantic information associated with a transition in the grammar.

12. The computer-readable medium of claim 11 wherein the data structure further comprises a symbol string formed of a sequence of symbols and wherein each semantic entry comprises a name offset that provides an offset to a symbol in the symbol string, the symbol identified by the offset representing a semantic tag.

13. The computer-readable medium of claim 12 wherein each semantic entry further comprises a transition index value that provides an index to a transition entry that represents the transition associated with the semantic information of the semantic entry.

14. A method of retrieving information from a binary grammar, the binary grammar describing a structure for a speech grammar, the method comprising:

receiving an index into a set of transition entries in a binary grammar;

converting the index into a memory offset relative to the beginning of the binary grammar based on a memory

offset to the beginning of the set of transition entries and a fixed size for each transition entry; and

using the memory offset to retrieve a value from the transition entry.

15. The method of claim 14 wherein retrieving a value from the transition entry comprises retrieving an index into a word string in the grammar, the index indicating the location of a word associated with the transition described by the transition entry.

16. The method of claim 14 wherein retrieving a value from the transition entry comprises retrieving a rule index to a rule entry in a set of rule entries in the grammar.

17. The method of claim 16 further comprising:

converting the rule index into a rule memory offset based on a memory offset to the beginning of the set of rule entries and a fixed size for each rule entry; and

using the rule memory offset to access a value in the rule entry.

18. The method of claim 17 wherein accessing a value in a rule entry comprises accessing an index to a transition entry in the set of transition entries

that represents the first transition for a rule represented by the rule entry.

19. The method of claim 14 wherein retrieving a value from the transition entry comprises retrieving a flag that indicates whether or not this transition is a last transition from a state in the grammar structure.

20. The method of claim 14 wherein retrieving a value from the transition entry comprises retrieving a flag indicating whether there is semantic information associated with the transition represented by the transition entry.

21. A computer-readable medium that provides a computer-loadable data structure representing a speech grammar, the data structure comprising:

a string of words containing words in the speech grammar; and

a set of fixed size transition entries, each transition entry representing a transition in a structure that describes the speech grammar, at least one transition entry making reference to a word in the string of words.

22. The computer-readable medium of claim 21 wherein the data structure further comprises:

a set of fixed size rule entries, each rule entry representing a collection of transitions in the structure and each entry including an index to a transition entry that represents the first transition in the collection of transitions.

23. The computer-readable medium of claim 21 wherein each transition entry comprises a last transition flag that indicates whether the transition for the transition entry is the last transition from a state in the structure.

24. The computer-readable medium of claim 21 wherein each transition entry comprises a semantic tag flag that indicates whether semantic information is associated with the transition for the transition entry.

25. The computer-readable medium of claim 24 wherein the data structure further comprises:

a string of symbols comprising text representing semantic tags and semantic values; and

a set of fixed size semantic entries, at least one semantic entry making reference to a semantic tag in the string of symbols.

26. The computer-readable medium of claim 21 wherein each transition entry comprises a next transition field that provides an index to a transition entry that represents a next transition in the structure.